



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-0644; Directorate Identifier 2010-NM-265-AD; Amendment 39-17026; AD 2012-08-09]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 777-200, -200LR, -300, -300ER, and 777F series airplanes. This AD was prompted by reports of cracks found in the web pockets of the wing center section (WCS) spanwise beams. This AD requires repetitive detailed inspections and high frequency eddy current inspections for cracks of the WCS spanwise beams, and repair if necessary. We are issuing this AD to detect and correct cracking in the WCS spanwise beams, which could result in reduced structural integrity of the wings.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail me.boecom@boeing.com; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service

information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: James Sutherland, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6533; fax: 425-917-6590; e-mail: James.Sutherland@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on June 29, 2011 (76 FR 38072). That NPRM proposed to require repetitive detailed inspections and high frequency eddy current (HFEC) inspections for cracks of the WCS spanwise beams, and repair if necessary.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (76 FR 38072, June 29, 2011) and the FAA's response to each comment.

Requests to Reference Service Bulletin Information Notice (IN) and Revised Service Bulletin

American Airlines (AAL) requested that we revise the NPRM (76 FR 38072, June 29, 2011) to refer to Boeing Service Bulletin Information Notice 777-57A0087 IN 01, dated March 24, 2011. AAL stated that this IN addresses information that is critical to the correct design and installation of repairs. If this IN is not incorporated, AAL asserted that the repairs could be designed and installed improperly.

Boeing and Continental Airlines requested that we revise the NPRM (76 FR 38072, June 29, 2011) to refer to Boeing Service Bulletin 777-57A0087, Revision 1, dated August 24, 2011. They stated that without incorporating the latest issue of this service bulletin, the repairs provided in the original issue of this service bulletin could be installed improperly because the original issue of this service bulletin contains minor deficiencies.

Since we issued the NPRM (76 FR 38072, June 29, 2011), Boeing has issued Service Bulletin 777-57A0087, Revision 1, dated August 24, 2011, which incorporates the changes outlined in Boeing Service Bulletin Information Notice 777-57A0087 IN 01, dated March 24, 2011. Therefore, we agree to refer to Boeing Service Bulletin 777-57A0087, Revision 1, dated August 24, 2011, not the earlier Boeing Service Bulletin Information Notice 777-57A0087 IN 01, dated March 24, 2011.

Boeing Service Bulletin 777-57A0087, Revision 1, dated August 24, 2011, was revised to, among other things, clarify and provide additional repair information. We have changed paragraphs (c), (g), and (h) of this AD to refer to Boeing Service Bulletin 777-57A0087, Revision 1, dated August 24, 2011. We have also added new paragraph (i) to this AD to give credit to operators for actions done before the effective date of this AD in accordance with Boeing Alert Service Bulletin 777-57A0087, dated November 11, 2010, since accomplishment of that service bulletin adequately addresses the unsafe condition. We have re-identified subsequent paragraphs accordingly.

Request to Clarify Inspection Terminology

FedEx requested that we revise the NPRM (76 FR 38072, June 29, 2011) to refer to a detailed visual inspection, rather than a detailed inspection. The Accomplishment Instructions of Boeing Service Bulletin 777-57A0087, Revision 1, dated August 24, 2011, calls out a “detailed inspection.” FedEx indicated that, while it is clear that the inspection is meant to be a visual inspection, the term “visual” is not used anywhere in the definition in either Boeing Service Bulletin 777-57A0087, Revision 1, dated August 24, 2011, or in the NPRM.

We disagree. The term “intensive” in the definition of a detailed inspection indicates that the inspection demands a higher level of scrutiny than using only visual means to find unsatisfactory conditions that are more difficult to detect. The mention of “elaborate procedures” used in the definition of a detailed inspection raises the awareness that extraordinary means of gaining access by removing adjacent items, de-fueling tanks, etc., are necessary to perform the inspection, and hence, the inspection cannot be performed by visual means only. We have not changed the final rule in this regard.

Request to Provide Boeing with AMOC Authoring Authority

FedEx suggested that the FAA provide Boeing with AMOC authoring authority for the proposed rule NPRM (76 FR 38072, June 29, 2011) on an aircraft-by-aircraft basis.

We agree to clarify. Boeing Commercial Airplanes has received an Organization Designation Authorization (ODA), which provides Boeing with AMOC authoring authority. We included paragraph (j)(3) in the NPRM to reflect Boeing’s authorization. We have not changed the final rule in regard to this issue.

Additional Change Made to this AD:

We have revised the wording of paragraph (i) of this AD; this change has not changed the intent of that paragraph.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously, and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (76 FR 38072, June 29, 2011) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (76 FR 38072, June 29, 2011).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Costs of Compliance

We estimate that this AD affects 160 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Detailed inspection and high frequency eddy current inspection of spanwise beam	50 work-hours X \$85 per hour = \$4,250 per inspection cycle	\$0	\$4,250 per inspection cycle	\$680,000 per inspection cycle

We have received no definitive data that would enable us to provide cost estimates for the on-condition repair actions specified in this AD. We have no way of determining the number of aircraft that might need these repairs.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA

Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

2012-08-09: The Boeing Company: Amendment 39-17026; Docket No. FAA-2011-0644; Directorate Identifier 2010-NM-265-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 777-200, -200LR, -300, -300ER, and 777F series airplanes, certificated in any category, as identified in Boeing Service Bulletin 777-57A0087, Revision 1, dated August 24, 2011.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 57: Wings.

(e) Unsafe Condition

This AD was prompted by reports of cracks found in the web pockets of the wing center section (WCS) spanwise beams. We are issuing this AD to detect and

correct cracking in the WCS spanwise beams, which could result in reduced structural integrity of the wings.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Repetitive Inspections

At the later of the times specified in paragraphs (g)(1) and (g)(2) of this AD, do a detailed inspection and a high frequency eddy current inspection for cracks of the web pockets of the WCS spanwise beams numbers 1, 2, and 3; and a detailed inspection for cracks of any previously installed repairs; in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-57A0087, Revision 1, dated August 24, 2011. Repeat the inspections thereafter at intervals not to exceed 8,000 flight cycles.

(1) Before the accumulation of 8,000 total flight cycles.

(2) Within 6,000 flight cycles, or 1,125 days, after the effective date of this AD, whichever occurs first.

(h) Corrective Actions

If any cracking is found during any inspection required by paragraph (g) of this AD, before further flight, repair the crack, including related investigative actions and all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-57A0087, Revision 1, dated August 24, 2011; except where Boeing Service Bulletin 777-57A0087, Revision 1, dated August 24, 2011, specifies to contact Boeing for repair instructions, before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(i) Credit for Actions Previous Actions

This paragraph provides credit for actions required by paragraphs (g) and (h) of this AD if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 777-57A0087, dated November 11, 2010.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be e-mailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(k) Related Information

For more information about this AD, contact James Sutherland, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office

(ACO), 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6533; fax: 425-917-6590; e-mail: James.Sutherland@faa.gov.

(I) Material Incorporated by Reference

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) of the following service information under 5 U.S.C. 552(a) and 1 CFR part 51:

(i) Boeing Service Bulletin 777-57A0087, Revision 1, dated August 24, 2011.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail me.boecom@boeing.com; Internet <https://www.myboeingfleet.com>.

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on April 11, 2012.

John P. Piccola,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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